

IN THE CLAIMS

1. (Currently Amended) A network processing device, comprising:
a memory for storing a dynamically configurable set of signaling templates;
a trunk controller for receiving and transmitting line signaling; and
a device processor within a signaling state machine for conducting the line signaling by executing one of the dynamically configurable signaling templates in the memory, the device processor capable of programming a new signaling template into the dynamically configurable set of signaling templates and to associate the new signaling template with a trunk, the new signaling template association overriding an old association between an old signaling template in the dynamically configurable set of signaling templates associated with and the trunk.

2. (Original) A network processing device according to claim 1 wherein the processor can delete an unneeded signaling template from the dynamically configurable set of signaling templates in the memory.

3. (Original) A network processing device according to claim 2 wherein the processor deletes the unneeded signaling template from the dynamically configurable set of signaling templates in the memory upon receiving a user command.

4. (Original) A network processing device according to claim 1, wherein the processor can insert a new signaling template to the dynamically configurable set of signaling templates in the memory.

5. (Original) A network processing device according to claim 4 wherein the processor inserts the new signaling template from the dynamically configurable set of signaling templates in the memory upon receiving a user command.

6. (Original) A network processing device according to claim 1 wherein the network processing device further comprises a digital signaling processor (DSP) for detecting and generating tones.

7. (Canceled)

8. (Previously Presented) A network processing device according to claim 1 wherein the template includes characters representing the set of directives.

9. (Previously Presented) A network processing device according to claim 8 wherein the characters of the template are drawn from a set that map to an internal set of directives stored in the state machine to be used to specify the exact signaling behavior expected.

10. (Previously Presented) A network processing device according to claim 8 wherein the template represents a set of directives for controlling a state machine and line signaling, tone generation, and tone detection in a network processing device for an incoming call.

11. (Previously Presented) A network processing device according to claim 8 wherein the template represents a set of directives for controlling a state machine and line signaling, tone generation, and tone detection in a network processing device for an outgoing call.

12. (Currently Amended) A method for configuring a trunk controller in a network processing device, the method comprising:

programming a Dynamically Configurable Signaling State Machine with a new template to use in signaling over a trunk, ~~the new template overriding an old template associated with the trunk;~~

assigning a name to the new template;

associating the name for the new template with the trunk, overriding an old association between an old template and the trunk;

determining signaling used over the trunk connected to the trunk controller;

giving the trunk controller the name for the new template in a Dynamically Configurable Signaling State Machine (DCSSM) representing the signaling; and
conducting signaling on the trunk controller using the new template.

13. (Previously Presented) A method according to claim 12, wherein:
determining signaling includes:

determining an incoming signaling for calls incoming to the trunk controller over the trunk; and
determining an outgoing signaling for calls outgoing from the trunk controller over the trunk; and
giving the trunk controller the name includes:
giving the trunk controller an incoming name for a template in the DCSSM representing the incoming signaling; and
giving the trunk controller an outgoing name for a template in the DCSSM representing the outgoing signaling.

14. (Original) A method according to claim 12, the method further comprising informing the DCSSM by the trunk controller of the name for the template with which to process calls over the trunk.

15. (Original) A method according to claim 14, wherein informing the DCSSM includes:
informing the DCSSM by the trunk controller of an incoming signaling name for the template with which to process incoming calls over the trunk; and
informing the DCSSM by the trunk controller of an outgoing name for the template with which to process outgoing calls over the trunk.

16. (Currently Amended) A method for using a Dynamically Configurable Signaling State Machine (DCSSM) in a network processing device for processing signaling over a trunk, the method comprising:

programming the Dynamically Configurable Signaling State Machine with a new template to use in signaling over the trunk, ~~the new template overriding an old template associated with the trunk;~~
assigning a name to the new template;
associating the name for the new template with the trunk, overriding an old association between an old template and the trunk;
receiving the name of the new template representing a signaling; and
processing signaling over the trunk according to the new template.

17. (Previously Presented) A method according to claim 16, wherein:

receiving the name of the new template includes:

receiving an incoming name of an incoming template representing an incoming signaling; and

receiving an outgoing name of an outgoing template representing an outgoing signaling; and

processing signaling includes:

processing incoming signaling according to the incoming template; and

processing outgoing signaling according to the outgoing template.

18. (Previously Presented) A method according to claim 16, wherein processing signaling includes:

receiving the signaling;

comparing the signaling with a set of directives represented by the new template; and

performing the set of directives represented by the new template.

19. (Original) A method according to claim 18, wherein processing signaling further includes reporting an error if the signaling does not match the set of directives represented by the template.

20. (Currently Amended) A computer-readable medium containing a program for using a Dynamically Configurable Signaling State Machine (DCSSM) in a network processing device for processing signaling over a trunk, the program comprising:

programming software to program the Dynamically Configurable Signaling State Machine with a new template to use in signaling over the trunk, ~~the new template overriding an old template associated with the trunk;~~

assignment software to assign a name to the new template;

association software to associate the name for the new template with the trunk, overriding an old association between an old template and the trunk;

first reception software to receive the name of the new template representing a signaling, the name of the template determined using the signaling over the trunk; and processing software to process signaling over the trunk according to the template.

21. (Original) A computer-readable medium containing a program according to claim 20, wherein processing signaling includes:

second reception software to receive the signaling;
comparison software to compare the signaling with a set of directives represented by the template; and
performance software to perform the set of directives represented by the template.

22. (Currently Amended) A network processing device for processing signaling over a trunk using a Dynamically Configurable Signaling State Machine (DCSSM), the device comprising:

means for programming the Dynamically Configurable Signaling State Machine with a new template to use in signaling over the trunk, ~~the new template overriding an old template associated with the trunk;~~

means for assigning a name to the new template;

means for associating the name for the new template with the trunk, overriding an old association between an old template and the trunk;

means for receiving the name of the new template representing a signaling; and

means for processing signaling over the trunk according to the template.

23. (Previously Presented) A device according to claim 22, wherein processing signaling includes:

means for receiving the signaling;

means for comparing the signaling with a set of directives represented by the template; and

means for performing the set of directives represented by the template.

24. (Currently Amended) A computer-readable medium containing a program for configuring a trunk controller in a network processing device, the method comprising:

programming software to program a Dynamically Configurable Signaling State Machine with a new template to use in signaling over a trunk, ~~the new template overriding an old template associated with the trunk;~~

assignment software to assign a name to the new template;

~~programming a Dynamically Configurable Signaling State Machine with a new template to use in signaling over a trunk, the new template overriding an old template associated with the trunk;~~

~~assigning a name to the new template;~~

association software to associate the name for the new template with the trunk, overriding an old association between an old template and the trunk;

determination software to determine signaling used over the trunk connected to the trunk controller;

giving software to give the trunk controller the name for the new template in a Dynamically Configurable Signaling State Machine (DCSSM) representing the signaling; and

conducting software to conduct signaling on the trunk controller using the new template.

25. (Previously Presented) A computer-readable medium containing a program according to claim 24, wherein:

the determination software includes:

determination software to determine an incoming signaling for calls incoming to the trunk controller over the trunk; and

determination software to determine an outgoing signaling for calls outgoing from the trunk controller over the trunk; and

the giving software includes:

giving software to give the trunk controller an incoming name for a template in the DCSSM representing the incoming signaling; and

giving software to give the trunk controller an outgoing name for a template in the DCSSM representing the outgoing signaling.

26. (Currently Amended) A network processing device for configuring a trunk controller, the device comprising:

means for programming a Dynamically Configurable Signaling State Machine with a new template to use in signaling over a trunk, ~~the new template overriding an old template associated with the trunk;~~

means for assigning a name to the new template;

means for associating the name for the new template with the trunk, overriding an old association between an old template and the trunk;

means for determining signaling used over the trunk connected to the trunk controller;

means for giving the trunk controller the name for the new template in a Dynamically Configurable Signaling State Machine (DCSSM) representing the signaling; and

means for conducting signaling on the trunk controller using the new template.

27. (Previously Presented) A device according to claim 26, wherein:

means for determining signaling includes:

means for determining an incoming signaling for calls incoming to the trunk controller over the trunk; and

means for determining an outgoing signaling for calls outgoing from the trunk controller over the trunk; and

means for giving the trunk controller a name includes:

means for giving the trunk controller an incoming name for a template in the DCSSM representing the incoming signaling; and

means for giving the trunk controller an outgoing name for a template in the DCSSM representing the outgoing signaling.

28. (New) A network processing device according to claim 4 wherein the processor can delete an unneeded signaling template from the dynamically configurable set of signaling templates in the memory.

29. (New) A network processing device according to claim 5 wherein the processor can delete an unneeded signaling template from the dynamically configurable set of signaling templates in the memory upon receiving a user command.

30. (New) A method according to claim 12, wherein programming a Dynamically Configurable Signaling State Machine with a new template includes inserting the new template into the Dynamically Configurable Signaling State Machine.

31. (New) A method according to claim 30, wherein programming a Dynamically Configurable Signaling State Machine with a new template further includes deleting an unneeded template from the Dynamically Configurable Signaling State Machine.

32. (New) A method according to claim 16, wherein programming the Dynamically Configurable Signaling State Machine with a new template includes inserting the new template into the Dynamically Configurable Signaling State Machine.

33. (New) A method according to claim 32, wherein programming the Dynamically Configurable Signaling State Machine with a new template further includes deleting an unneeded template from the Dynamically Configurable Signaling State Machine.

34. (New) A computer-readable medium containing a program according to claim 20, wherein the programming software includes insertion software to insert the new template into the Dynamically Configurable Signaling State Machine.

35. (New) A computer-readable medium containing a program according to claim 34, wherein the programming software further includes deletion software to delete an unneeded template from the Dynamically Configurable Signaling State Machine.

36. (New) A device according to claim 22, wherein the means for programming includes means for inserting the new template into the Dynamically Configurable Signaling State Machine.

37. (New) A device according to claim 36, wherein the means for programming further includes means for deleting an unneeded template from the Dynamically Configurable Signaling State Machine.

38. (New) A computer-readable medium containing a program according to claim 24, wherein the programming software includes insertion software to insert the new template into the Dynamically Configurable Signaling State Machine.

39. (New) A computer-readable medium containing a program according to claim 38, wherein the programming software further includes deletion software to delete an unneeded template from the Dynamically Configurable Signaling State Machine.

40. (New) A device according to claim 22, wherein the means for programming includes means for inserting the new template into the Dynamically Configurable Signaling State Machine.

41. (New) A device according to claim 40, wherein the means for programming further includes means for deleting an unneeded template from the Dynamically Configurable Signaling State Machine.